

AMENDMENTS TO THE CLAIMS:

This listing of claims will replace, without prejudice, all prior versions, and listings, of claims in the application.

Listing of Claims:

1. (Currently Amended) A method for controlling wheel brakes in an electrical braking system of a motor vehicle, comprising the steps of:

generating control driving signals in a first control module for valve arrangements for a control of a braking pressure in a first group of the wheel brakes, wherein the first control module and the first group of wheel brakes are powered by [[from]]a first electrical power circuit; [[and]]

generating electrical control driving signals in a second control module for a control of a braking pressure in a second group of the wheel brakes, wherein the second control module and the second group of wheel brakes are powered by [[from]] a second electrical power circuit that is independent of the first electrical power circuit, and wherein the second group of the wheel brake is independent of the first group of the wheel brakes; and

detecting a fault in an area of at least one of the valve arrangements, a pressure supply, and an electrical system of the electrical braking system, wherein:

when the fault affects those of the wheel brakes supplied by the first electrical power circuit, the control driving signals for one of the valve arrangements are generated, a power for an activation of the one of the valve arrangements originating from the second electrical power circuit, and a warning is generated to inform a driver of fault detection; and

in the fault condition of one of the wheel brakes, a speed of the motor vehicle is limited by an intervention of at least one of engine management and transmission management.

2. (Cancelled).

3. (Previously Presented) The method according to claim 1, wherein:

when the fault condition occurs, the control driving signals are generated to actuate at least one of additional valve arrangements and existing valve arrangements via a redundant electrical control on the basis of the power of the second power circuit.

4. (Currently Amended) A method for controlling wheel brakes in an electrical braking system of a motor vehicle, comprising the steps of:

generating control driving signals in a first control module for valve arrangements for a control of a braking pressure in a first group of the wheel brakes, wherein the first control module and the first group of wheel brakes are powered by [[from]]a first electrical power circuit; [[and]]

generating electrical control driving signals in a second control module for a control of a braking pressure in a second group of the wheel brakes, wherein the second control module and the second group of wheel brakes are powered by [[from]]a second electrical power circuit that is independent of the first electrical power circuit, and wherein the second group of the wheel brakes is independent of the first group of the wheel brakes; and

detecting a fault in an area of at least one of the valve arrangements, a pressure supply, and an electrical system of the electrical braking system, wherein:

when the fault affects those of the wheel brakes supplied by the first electrical power circuit, the control driving signals for one of the valve arrangements are generated, a power for an activation of the one of the valve arrangements originating from the second electrical power circuit; and

in the fault condition of one of the wheel brakes, a speed of the motor vehicle is limited by an intervention of at least one of engine management and transmission management.

5. (Cancelled)

6. (Previously Presented) The method according to claim 1, wherein:

in the fault condition in an area of a front axle brake actuator, a braking pressure control occurs in front ones of the wheel brakes according to control driving

signals generated from a control module assigned to one of rear ones of the wheel brakes.

7. (Cancelled)

8. (Previously Presented) The method according to claim 1, wherein:

when the fault condition occurs, control driving signals of a control module of those of the wheel brakes corresponding to rear axle brakes are generated to activate additional valve arrangements via which a braking pressure in those of the wheel brakes corresponding to front wheel brakes is set.

9. (Currently Amended) A computer program stored on a memory configured to be executed by a computer, the computer program comprising program code for controlling wheel brakes in an electrical braking system of a motor vehicle in accordance with a method comprising

generating control driving signals in a first control module for valve arrangements for a control of a braking pressure in a first group of wheel brakes, wherein the first control module and the first group of wheel brakes are powered by [[from]] a first electrical power circuit; [[and]]

generating electrical control driving signals in a second control module for a control of a braking pressure in a second group of the wheel brakes, wherein the second control module and the second group of wheel brakes are powered by [[from]] a second electrical power circuit that is independent of the first electrical power circuit, and wherein the second group of the wheel brakes is independent of the first group of the wheel brakes; and

detecting a fault in an area of at least one of the valve arrangements, a pressure supply, and an electrical system of an electrical braking system, wherein:

when the fault affects those of the wheel brakes supplied by the first electrical power circuit, the control driving signals for one of the valve arrangements are generated, a power for an activation of the one of the valve arrangements originating from the second electrical power circuit, and a warning is generated to inform a driver of fault detection; and

in the fault condition of one of the wheel brakes, a speed of the motor vehicle is limited by an intervention of at least one of engine management and transmission management.

10. (Currently Amended) A method for controlling wheel brakes in an electrical braking system of a motor vehicle, comprising the steps of:

generating electrical control driving signals in a first control module for valve arrangements for a control of a braking pressure in a first group of the wheel brakes, wherein the first control module and the first group of wheel brakes are powered by [[from]] a first electrical power circuit; [[and]]

generating electrical control driving signals in a second control module for a control of a braking pressure in a second group of the wheel brakes, wherein the second control module and the second group of wheel brakes are powered by [[from]] a second electrical power circuit that is independent of the first electrical power circuit, wherein the second group of the wheel brakes is independent of the first group of the wheel brakes; and

detecting a fault in an area of at least one of the valve arrangements, a pressure supply, and an electrical system of the electrical braking system, wherein:

when the fault affects those of the wheel brakes supplied by the first electrical power circuit, the control driving signals for one of the valve arrangements are generated, a power for an activation of the one of the valve arrangements originating from the second electrical power circuit, and a warning is generated to inform a driver of fault detection, and a speed of the motor vehicle is limited by an intervention of at least one of engine management and transmission management.